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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

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REPLY TO: 3430 Evaluation

December 26, 1978

SUBJECT: Need for a Biological Evaluation of Tree
Mortality on North Fork of Middle Fork American
River

TO: Forest Supervisor, Tahoe N.F.

No evaluation conducted



The Foresthill Ranger District intends to offer a salvage sale in the North Fork of Middle Fork American River Roadless Area. Kevin Casey, Forester on the Foresthill Ranger District has indicated that the stand structure, host trees and insect pests in the American River area are very similar to those described in the May 1, 1978 Biological Evaluation of the Rubicon Roadless Area on the Eldorado N.F. Bob Rogers, Foresthill District Silviculturist, also feels that the physical and biological characteristics of the two roadless areas are the same in most cases. Kevin has asked whether there is a need for a Biological Evaluation of the American River Roadless Area prior to sale preparation.

The FIDM Staff feels that a Biological Evaluation of the American River Roadless Area prior to sale preparation is probably not necessary. The management options presented in the Rubicon area evaluation can generally be applied to the American River area with some slight modifications.

The Rubicon evaluation was written in May 1978 and the projections of future mortality were from that date. A recent Report to the California Board of Forestry which specifically mentions the Middle Fork of the American River has been enclosed. The report states that, although there was high mortality in the area this year, no active broods of bark beetles were found during November, 1978. If precipitation is normal or above normal for the remainder of the season, mortality should be much lower during 1979.

Management Option 2 in the Rubicon evaluation indicates the need for proper disposal of green slash to minimize future mortality. If pine trees with green foliage such as previous top kills or high risk trees are cut, it is possible for pine engravers, *Ips* spp., to build up in untreated green slash. High midsummer populations of pine engravers can cause considerable topkilling of healthy trees in a localized area. Slash created during the warmer parts of the year will usually dry out, or heat up, before pine engravers can complete a life cycle if the slash is lopped and scattered in sunny places. Slash created during the cooler parts of the year is less likely to dry out in time and more extensive slash treatment such as burning, chipping or mashing would be necessary for effective pine engraver control.

It is possible that logging activities could increase localized mortality due to armillaria root rot. The root rot fungus, Armillaria mellea, is commonly present in the forest as a saprophyte or secondary organism in association with hardwoods and in most cases, is not a serious problem. When the fungus invades the roots of dying oak trees however, it may be able to kill conifers whose roots are within the root zone of dying oaks. Recently killed or severely damaged oaks can remain a potential threat, especially to conifer reproduction, for many years. Efforts should be made during the salvage operation to avoid excessive damage to living oak trees in the vicinity of conifers.

Feel free to contact the FIDM Staff if any additional input is necessary to prepare this sale.

James W. Byler

for WILFRED L. FREEMAN, JR.,, Director
Forest Insect and Disease Management

Enclosure